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# ***Product Update***

## ***ISDN CAPI 2.0***

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## 1. Introduction

This update explains how to make the ISDN TA PC Card (with DSS1 D-channel protocol) work with RVS-COM Lite for Windows 95/NT, which supports CAPI 2.0, X.75, and other popular applications in most western European countries.

After RVS-COM Lite is installed, you can find RVS-COM application details in **Online Documentation**.

**NOTE:** *If ACOTEC ISDN for Windows 95 is installed in your system, remove it completely to avoid any problems that could occur with this installation.*

The ISDN TA PC Card supports CAPI drivers. With optional CAPI-based software like RVS-COM Lite, it not only supports ISDN data, but the following functions also become possible:

1. Fax service—Allows you to send and receive G3 standard fax messages via Microsoft Exchange, Messaging System, and Outlook.
2. Answering machine—The ISDN TA PC card works as a digital answering machine with the CAPI-based application program.
3. EuroFile Transfer—Allows you to send and receive files when the EuroFile Transfer function is running.
4. ISDN modem—The virtual modem function allows all modem-based applications to use the ISDN TA PC Card to connect via ISDN line. The ISDN modem is a software modem that, like a FOSSIL driver, “understands” AT commands and converts them into CAPI 2.0 function calls. The ISDN modem can be used with some modem applications in Windows 95, e.g., Dial-Up Networking and HyperTerminal (Hypertrm). It was designed for Windows 95-compliant modem applications (TAPI, VCOMM, Unimodem).

**NOTE:** *The ISDN modem is not an emulation of an analog modem (i.e., it does not transmit tones). Consequently, you cannot use it to set up a connection to non-ISDN mailboxes, nor can you test it with tools designed for analog modems.*

5. Telephony—Telephony function turns your laptop into a complete ISDN telephone (full duplex sound card is required in your laptop).

## 2. Preparation

To run RVS-COM on your computer, you must have Windows 95 or OSR2 installed with Microsoft Exchange and CAPI driver.

### Microsoft Exchange

Refer to the Windows 95 user's manual for additional details about MS Exchange installation and configuration.

1. Select **Control Panel ➤ Add/Remove Program ➤ Windows Setup**.
2. Click **Microsoft Exchange** (or **Windows Messaging** in OSR2) check box. Click **OK**.
3. Select **Manual method to set the service**.
4. Add the service **Personal Notes (Address Book** in OSR2) and **Personal Directory (Folders** in OSR2).
5. When adding the **Personal Directory**, provide a path for a **pst** file. For example, if **temp** subdirectory exists, name the path **c:\temp\new.pst**.

### CAPI Driver

To install the CAPI driver for the ISDN TA PC Card:

1. Plug the ISDN TA PC Card into a free PCMCIA slot. Windows 95 automatically detects the PC Card.
2. Choose **Driver from disk provided by hardware manufacturer**, then insert the

**ISDN TA CAPI** driver disk. Enter the correct driver path, e.g., **A:\**. Click **OK**.

3. Follow the instructions that appear on the Windows 95 screen to install all VCOMM and NDIS drivers. The default current active API will be set to CAPI.

To change the setting to CAPI Mode:

1. Select **Start ➤ Programs ➤ ISDN TA Configuration utility ➤ Configuration Utility**.
2. From the Menu bar, click **Mode ➤ Mode Change** and select **CAPI** from the **Mode Choice** list. Click **OK**.

### 3. RVS-COM Lite Installation

To install RVS-COM Lite on your PC:

1. Click **Start ➤ Settings ➤ Control Panel**. Double-click **Add/Remove Programs**. Click **Install**.
2. Insert the RVS-COM CD-ROM into your CD drive. Then click **Next**.
3. **D:\SETUP.EXE** appears in the command line. Click **Finish**.
4. Enter the serial number (KEY), which is located on a sticker on the back of the CD-ROM. Click **SETUP** and follow on-screen instructions until setup is completed; then click **Finish**.
5. The **RVS-COM installation Wizard** appears automatically. Click **Next**.
6. From the list, choose the appropriate installation components for your applications. For example: ISDN CAPI Adapter  
ISDN Line/Phone Numbers  
RVS ISDN Modems  
RVS E-Mail Services  
File Transfer Host
7. Click **Next** twice.

### ISDN CAPI Adapter Configuration

1. The **RVS-COM Installation: ISDN Adapter** window appears. Click **Next**.  
The **ISDN Protocols and Services** window appears. Click **Next**.
2. The **ISDN Softfax** window appears. Select the following:  
**Use Softfax to send fax**  
**Use Softfax to receive fax**  
**Softfax should also receive at 14400 bps**  
Click **Next**.
3. The **ISDN Softmodem** window appears. Select **Use Softmodem**, then click **Next**. Then click **Finish**.

### ISDN Line/Phone Numbers Configuration

1. The **ISDN Line/Phone Numbers** window appears. Click **Next**.
2. The **ISDN Line and Location** window appears. Enter the correct ISDN line type. For example, **Europe, Euro-ISDN (DSS1)**.
3. Click **Dialing Properties** to change Location, Country Code, Area Code, or Access Code. Click **OK** when finished to return to **ISDN Line and Location** window. Then click **Next**.
4. The **Charges** window appears. Enter the unit charge information for your ISDN calls. Then click **Next**.
5. The **ISDN Phone Numbers** window appears. Enter your MSN number for each service. Then click **Next**.

**NOTE:** In Europe, if you subscribe to MSN service, specify a unique MSN number for each application such as Eurofile Transfer, Voice Mail, and G3 Fax. If not, you must enter the MSN number **0** for your application. You can enable one service **ONLY** with the MSN number **0** (for example, either G3 Fax, or Voice Mail, or Eurofile Transfer).

6. The **Phone Number for External Calls** window appears. Enter your ISDN phone number. Then click **Next**.

**NOTE:** Some switches need this phone number as the **calling party number** during ISDN connection setup

7. The **File Transfer Host** window appears. Enter phone numbers for your applications. Or, enter the numbers later. Click **Finish**.
8. The **RVS CAPI Modems** windows appears. Click **Next**. In the next window, specify the COM port for your CAPI modem. For example, **COM6**. Then click **Finish**.

### **E-Mail Transport Services Configuration**

1. The **E-Mail Transport Services** window appears. Click **Next**. In the next screen, select **RVS Fax** and **RVS Voice Mail** to enable voice and fax functions. Then click **Next**.

*If you do not activate fax and voice functions, skip steps 3 through 7 below.*

2. The **Fax** window appears. Enter your sender identification information. Click **Next**.
3. Select **ISDN Fax G3** as your fax device. Click **Next**.
4. Enter the phone number information for the fax service. Click **Next**.
5. Enter the phone number for fax reception. Click **Next**.
6. The **Voice Mail** window appears. Enter the answerphone number. Click **Answerphone** to edit your messages. Click **Finish**.

### **File Transfer Host Configuration (Host Mode in RVS CommCenter)**

1. The **File Transfer Host** window appears. Click **Next**.
2. In the next window, enter the **ID** and **password** for your file transfer host, which

allow remote callers to log into specified folders and access data.

3. Specify the file folder path that requires ID and password for caller access.
4. Specify the file folder path that allows caller access without ID and password
5. Click **Finish**.

The Installation Wizard is finished now. Click **OK** to start the CommCenter and activate the installed services. Reboot your laptop. RVS-COM is completely installed now. To change RVS-COM settings, open **RVS CommCenter**.

## 4. Applications

### 4.1 Using PPP Protocol to Connect to ISPs

Select **My computer ➡ Control Panel ➡ Modems**. If **RVS ISDN Internet PPP** appears in the list under the **General** tab, RVS-COM was installed successfully. Otherwise, check the RVS-COM installation. Or, call the RVS-COM support center for help.

Select **Control Panel ➡ Add/Remove Programs ➡ Windows Setup tab ➡ Communications ➡ Details** to ensure **Dial-Up Networking** appears in the Components list. If it is not installed (the box next to the folder is not checked), follow these instructions:

1. In the **Dial-Up Networking** folder, click **Make New Connection**. Enter a name for the new connection icon. For example: **RVS\_1**. Select **RVS ISDN Internet PPP**.
2. With the right mouse button, click the new connection icon.
3. In the **General** menu, enter the phone number you want to dial. Select **RVS ISDN Internet PPP** from the **Connect Using** box.
4. In the **Server Type** menu, select **PPP: Win95, Windows NT 3.5, Internet** from the **Type of**



**Dial-Up Server** box.

5. Click the appropriate **Advanced Options** and select, at least, TCP/IP in **Network Protocols** for your Internet application
6. Click the **TCP/IP Settings** button and specify the other TCP/IP parameters, such as IP address and DNS address, if necessary.

Now you are ready to connect to your ISP via PPP protocol.

## 4.2 Using Multi-Link PPP to Connect to ISPs

1. Select **Start ➤ Programs ➤ RVS-COM Lite ➤ CommCenter**. If only one COM port, (for example, **ISDN**) is listed in **CommCenter controls the following ports:** text box, add another ISDN port.
2. To add another ISDN port, click **Add**. The **Add New Port** window appears. Select **An ISDN channel on your local PC**. Click **Next**.
3. Enter a new port name (for example, **ISDN2**). Click **Next**.  
Select **Let other programs use this as a COM port**. Click **Next**. Select a name for this port where it can be accessed in Windows. Click **Next**. Click **Finish**.
4. Select **My computer ➤ Control Panel ➤ Modem**. Click **Add**. Select **Other**. Click **Next**.
5. Select **Don't check my modem; I will select it from a list**. Click **Next**.
6. Select **RVS Datentechnik** from the Manufacturers list and **RVS ISDN Internet PPP** from the Models list. Click **Next**.
7. Select the RVS COM port just added. **RVS ISDN Internet PPP #2** should appear in the modem list.
8. In **My Computer** window, select the **Dial-Up Networking** folder. Click **Make new Connection** and enter a new connection name. For example, **RVS\_2**.

Select the modem **RVS ISDN Internet PPP**.  
Click **Next**.

9. Enter the phone number for the computer you want to dial. Click **Next**. Click **Finish** to return to the **Dial-Up Networking** window.
10. With the right mouse button, click the icon **RVS\_2**. Click **Properties**.
11. To make connections with Multi-Link PPP, click **Settings**. Select **Use additional devices**. Then click **Add**. Use the arrow to scroll down the **Device name** list and select **RVS ISDN Internet PPP #2**. Click **OK** twice.
12. Select the **Server Types** tab. Use the arrow to scroll down the **Type of Dial-Up Server** list and select **PPP: Win95, Windows NT 3.5, Internet**.
13. Click the appropriate **Advanced options**.
14. Under **Allowed network protocols**, select at least **TCP/IP** protocol for your Internet application.
15. Click **TCP/IP Settings** and specify other TCP/IP parameters such as IP address and DNS address, if necessary. Click **OK** when finished.

Now you are ready to communicate with your ISP via Multi-Link PPP protocol.

### 4.3 Making X.75 Connections

#### Act as a Called Party (for incoming calls)

1. Select **Start ➡ Programs ➡ RVS-COM Lite ➡ CommCenter**. Make sure the following settings are correct:
  - Your ISDN phone number
  - COM port assignment
  - MSN/EAZ numbersIf you change any settings, remember to reboot your system.
2. Select **My Computer ➡ Control Panel ➡ Modem**. Select **RVS ISDN X.75 transparent**.

Click **Properties**. Make sure the COM port is assigned correctly and no conflict exists. For example, **RVS Port (COM6)**. Click **OK**, then close the window.

3. Run Windows 95 **Hyperterm**. Set **ATS0=1** **<Enter>** by using the AT command to make the ISDN TA PC Card to automatically answer the incoming X.75 calls. Then wait for the incoming calls.

### Act as a Calling Party (make outgoing calls)

1. Select **Start ➤ Programs ➤ RVS-COM Lite ➤ CommCenter**. Make sure the following settings are correct:  
 Your ISDN phone number  
 the COM port assignment  
 MSN/EAZ numbers  
 If you change any settings, remember to reboot your system.
2. Select **My Computer ➤ Control Panel ➤ Modem**. Select **RVS ISDN X.75 transparent**. Click **Properties**. Make sure the COM port is assigned correctly and no conflict exists. For example, **RVS Port (COM6)**. Click **OK**, then close the window.
3. Run Windows 95 **Hyperterm**. Enter a name for the new connections. For example, **RVS\_X75**. Click **OK**. Enter the ISDN phone number that you want to connect to. Select **RVS ISDN X.75 transparent** in the **Connect using** box. Click **OK**. Click the **Dial** button to dial.

After you establish the ISDN link, you can use the data transmission protocol such as Z-modem or X-modem, for data transfer.

## 4.4 EuroFile Transfer Applications

### Act as a Called Party (Host Mode)

1. Select **Start ➤ Programs ➤ RVS-COM Lite ➤ CommCenter**.
2. Click the **Port** tab. Make sure the **ISDN** port

check box is checked. Click **Properties**.

In the **Port** tab, make sure your ISDN phone/MSN number for outgoing calls is correct.

3. Click the **Windows Port** tab. Make sure COM port is assigned and enabled.
4. Click the **Autoanswer** tab. Make sure **Answer calls automatically** and **Eurofile Transfer** check boxes are checked. Also, enter the phone/MSN number for **Eurofile Transfer**.
5. Click **Properties**, then click the **Answer call** tab. Enter the number of rings before answering. Click **OK**.
6. Make sure all the other settings in **RVS CommCenter** are correct. Click **OK**.
7. Click the **Host Mode** tab. Enter the **User ID** and **Password** for remote parties to use to log into the host. Specify the file folder path that allows:
  - remote access with ID and password
  - anonymous access without ID and password

Click **OK**.

8. Restart Windows 95. Open **CommCenter** again and make sure the **ISDN** port is in the **ISDN: waiting for calls** mode. Wait for incoming calls. Click **OK**.

### Act as a Calling Party

1. Select **Start ➤ Programs ➤ RVS-COM Lite ➤ Transfer Master**.
2. Double-click **General (ISDN-Eurofile)** in the **Presets** list. Enter **User name** and **Password** from Eurofile Transfer host (for logging into host). If you have not authorized **User name** and **password**, you can download only (no upload).
3. Click **Change**. Enter the host phone number you want to connect to. Click **OK**.
4. Open the **Device** tab and select **ISDN Eurofile Transfer** for the connection.

5. Click **Properties**. Enter the optimized block size for the file transfer (try 2048), your ISDN phone number, and MSN for outgoing calls. Click **Apply**, then **OK** twice to return to the **Connect To** window.
6. Click **Connect** to establish connection.

## 4.5 G3 Faxing Applications

To use RVS-COM to send/receive G3 faxes, the following components need to be installed:

- Microsoft Exchange (see MS Exchange installation)
- **RVS FAX** and **RVS Voice mail** (see RVS-COM Lite installation)

### Receiving

1. Select **Start ➡ Programs ➡ RVS-COM Lite ➡ CommCenter**.
2. In the **Ports** tab, make sure the **ISDN** port check box is activated. Click **Properties**.
3. Open the **Autoanswer** tab. Make sure **Answer calls automatically** and **Fax** check boxes are checked. Enter the phone/MSN number for fax services.
4. Click **Properties** and click the **Answer call** tab. Enter the number of rings for answering.
5. Open the **Fax ID** tab and enter your local fax ID. Click **OK**.
6. Open the **Windows Port** tab. Make sure the COM port is assigned and enabled. For example, **COM6**.
7. Open the **Port** tab. Make sure your ISDN phone/MSN number for outgoing calls is correct.
8. Make sure all the other settings in **RVS CommCenter** are correct. Click **Apply**, then **OK**. If any setting changed, reboot Windows 95. Wait for incoming fax calls.

### Sending

1. Select **Start ➡ Programs ➡ RVS-COM Lite ➡ Create new fax**. The Microsoft Mail window opens. Click **OK**.
2. Enter the name and fax number of the remote party that wants to connect. Click **Next**.
3. Enter the subject and text of the fax message you want to send. Or, skip by clicking **Next**.
4. Attach your fax cover page or skip by clicking **Next**.
5. To add file(s) with your message, click **Add File** to open your system folder to select the file. Click **OK**. The file appears in the **File to send** list. Click **Next**.
6. If you want to preview the fax document, click **Show fax...**, then click **Finish** to end the fax sending preparation. RVS then sends the fax for you automatically.

### 4.6 Voice Applications

With the RVS-COM Lite ISDN software package and laptop equipped with full-duplex sound card, voice applications are possible. These include:

- Digital answering machine
- ISDN phone (acts like a telephone where you communicate over ISDN line)

To use voice applications fully, especially the ISDN phone service, you need a full-duplex audio device (sound card). Full-duplex means your audio device can handle incoming and outgoing sound signals simultaneously (i.e., you can listen and talk at the same time). If you do not have full-duplex, you hear the caller only. However, this still allows you to run the answering machine function.

### Digital Answering Machine

1. Select **Start ➡ Programs ➡ RVS-COM Lite ➡ CommCenter**.
2. In the **Ports** tab, make sure the **ISDN** port check box is checked. Click **Properties**.

3. Open the **Port** tab. Make sure your ISDN phone/MSN number for outgoing calls is correct.
4. Open the **Windows Port** tab. Make sure the COM port is assigned and enabled. For example, **COM6**.
5. Open the **Autoanswer** tab. Make sure the **Answer calls automatically** and **Voice** boxes are checked. Enter the phone/MSN number for voice services.
6. Click **Properties**, then click the **Answer call** tab. Enter the value for the number of rings before answering. Click **OK** twice.
7. Click the **ISDN** tab. Select the appropriate ISDN voice coding for your area. A-law is commonly used in European countries. Mu-law is for US and Canada.
8. Make sure all the other settings in **RVS CommCenter** are correct.
9. Click **Apply**, then **OK**. If any setting changed, reboot Windows 95.

### Greeting/End Message Recording

You can use **Answerphone** to record/edit voice recordings.

1. Select **Start ➡ Programs ➡ RVS-COM Lite ➡ CommCenter**.
2. Open the **Ports** tab. Click **Properties**.
3. Open the **Autoanswer** tab. Click **Answerphone**.
4. Click **Add** to create a new schedule. Fill in data, then click the **Record calls** box.
5. The **Greeting** message plays when Answerphone answers incoming calls. The **End** message only plays when the option **Record calls** is checked and the caller exceeds the maximum recording time.

To change the **Greeting** or **End** message, click the appropriate **Edit** button to open the **Recorder** utility. Then start recording.

You can also use the **Recorder** utility to play and check recorded greeting/end messages. Or, you can import the prerecorded WAV format voice file as your greeting/end message. (**File ➡ Import** in **Recorder** utility) Click **OK** when finished.

6. To edit an existing schedule, select one and click **Properties**. Make desired changes in the **Schedule Properties** window.
7. Click **OK** to return to the **Answerphone** window. Click (enable) the message schedule just added or modified.
8. Select **Start ➡ Programs ➡ RVS-COM Lite ➡ Telephone**.
9. Click the **Answerphone** function bar to **ON** (**OFF** is for **ISDN Phone** services). Wait for incoming calls.

Incoming messages are stored in MS Exchange (**Inbox** on Windows 95 desktop screen). Double-click received voice mails to play the messages.

### ISDN Phone

1. Select **Start ➡ Programs ➡ RVS-COM Lite ➡ CommCenter**.
2. Open the **Ports** tab. Make sure the **ISDN** port box is checked. Click **Properties**.
3. Open the **Port** tab. Make sure your ISDN phone/MSN number for outgoing calls is correct.
4. Open the **Windows Port** tab. Make sure the COM port is assigned and enabled. For example, **COM6**.
5. Click **Autoanswer**. Make sure **Answer calls automatically** and **Voice** check boxes are checked. Enter the phone/MSN number for



voice services

6. Click **Properties**, then open the **Answer call** tab. Enter the number of rings before answering. Click **OK**.
7. Open the **ISDN** tab. Select the appropriate ISDN voice coding scheme for your area. A-law is commonly used in European countries. Mu-law is for US and Canada.
8. Make sure all the other settings in **RVS CommCenter** are correct.
9. Click **Apply**, then **OK**.  
If any setting changed, reboot Windows 95.
10. Select **Start ➤ Programs ➤ RVS-COM Lite ➤ Telephone**.
11. Click **Answerphone** function bar to **OFF** (**ON** is for **Answering machine** services).
12. Plug the microphone and speakerphone to the audio interface(s) on your laptop.
13. Use phone dialer in **RVS Phone** to dial out. When calls come in, the **RVS Phone** will automatically opens. Click **Accept** to pick up calls. Click **Hang Up** to disconnect the line when finished.